इंटरनेट मानक

Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”
Mazdoor Kisan Shakti Sangathan
“The Right to Information, The Right to Live”

“पुराने को छोड नये के तरफ”
Jawaharlal Nehru
“Step Out From the Old to the New”

IS 9146 (1979): Scissors, Dissecting, Straight and Curved on Flat, Mayo's Pattern [MHD 1: Surgical Instruments]

“ज्ञान से एक नये भारत का निर्माण”
Satyanarayan Gangaram Pitroda
“Invent a New India Using Knowledge”

Act Number 22 of 2005
The Indian Parliament
RIGHT TO INFORMATION

Made Available By
Public.Resource.Org

“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”
Bhartṛhari—Nītiśatakam
“Knowledge is such a treasure which cannot be stolen”

BLANK PAGE

BRUTUM FULMEN

IGNORANTIA JURIS NON EXCUSAT

PROTECTED BY COPYRIGHT

UDC 615·472·4

Surgical Instruments Sectional Committee, CPDC 11; Cutting and Holding Instruments Subcommittee, CPDC 11 : 1 [ Ref: Doc: CPDC 11 (1222) ]

*Indian Standard*

( Reaffirmed 2001 )

# SPECIFICATION FOR SCISSORS, DISSECTING, STRAIGHT AND CURVED ON FLAT, MAYO'S PATTERN

**1. Scope** — Dimensional and other requirements for scissors, dissecting, straight and curved on flat, Mayo's pattern used in general surgery.

**2. Shape & Dimensions** — As shown in Fig. 1.

**3. Material** — Scissors shall be made of stainless steel conforming to Designation 30Cr13 of IS : 6603-1972 'Specification for stainless steel bars and flats or to the following composition:

| *Element* | *Percent* |
|---|---|
| Carbon | 0·35 to 0·45 |
| Silicon | 0·10 to 0·70 |
| Manganese | 0·30 to 0·70 |
| Nickel | 1·00 *Max* |
| Chromium | 12·00 to 14·00 |

**4. Workmanship and Finish**

**4.1** Scissors shall be symmetrical and well formed.

**4.2** The blades along their length and the tips shall coincide and shall not over-ride, when the scissors is fully closed.

**4.3** The blades shall open and close without stiffness and shall have a slight cross-over action to give a continuous pinch, and shall have no play at the joint.

**4.4** Scissors shall be free from cracks, seams, burrs, flaws and other defects. The surfaces of the scissors shall be finished smooth, and polished bright passivated. The edges shall be even and rounded except for the cutting edge which shall be sharp. The cutting edge shall not have any feather, and shall be made hollow ground.

**5. Hardness** — Scissors shall be evenly hardened and tempered to give a hardness of 550 to 650 *HV*.

**6. Tests**

**6.1** *Performance* — The scissors shall cut wet tissue paper, teased-out cotton wool, fine hair and frayed lint accurately and cleanly from pinch to tip.

**6.2** *Hardness* — When tested on a hardness testing machine, the scissors shall have a Vicker's diamond pyramid hardness number as specified in **5**.

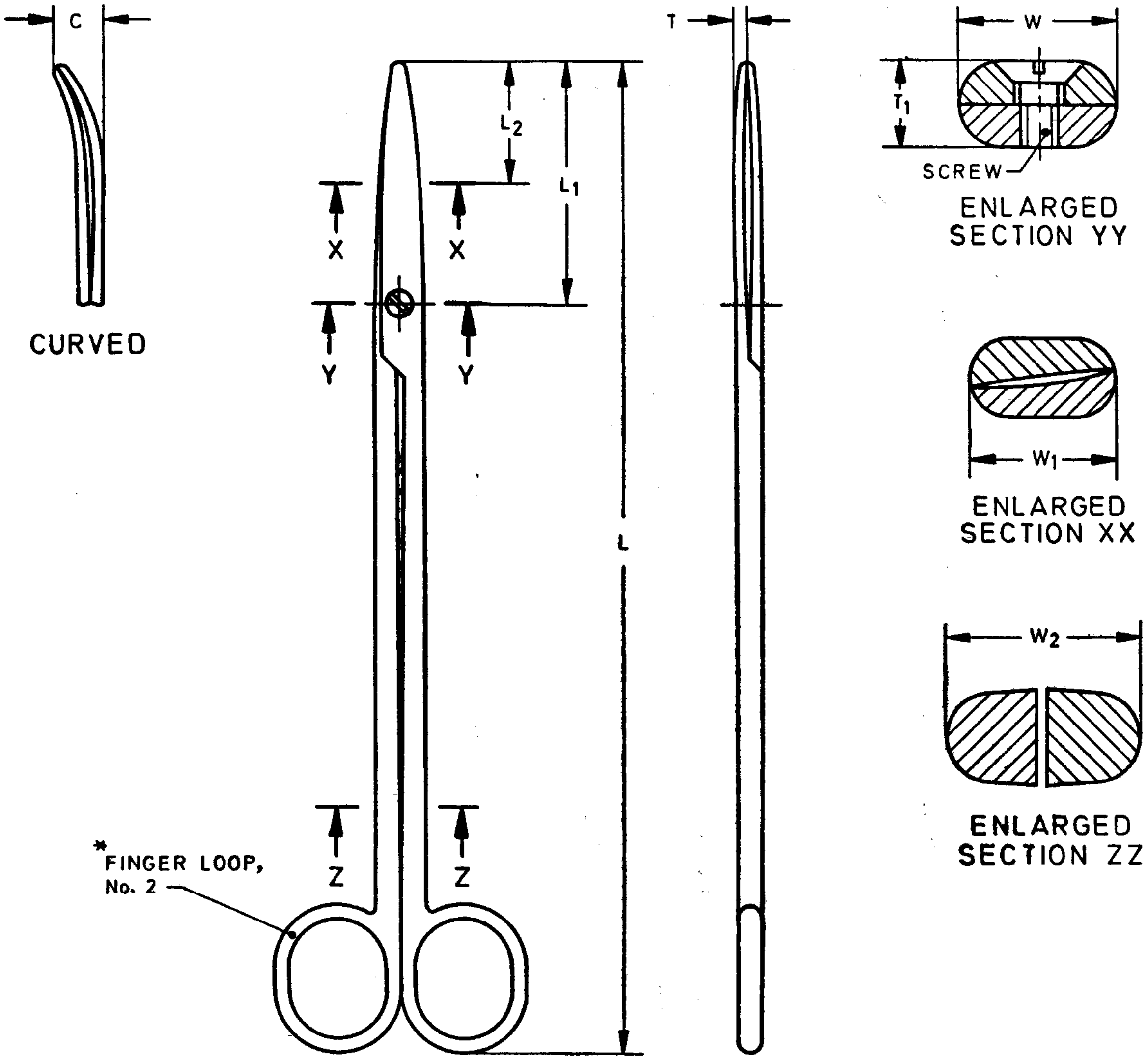
**6.3** *Flexibility* — The flexibility shall be tested as given in **6.3.1** and **6.3.2**.

**6.3.1** The finger ring of one arm of the scissors shall be fixed in a vice, with the shank and the blade projecting above the vice. By the application of force at a point 75 mm above the vice, the shank shall be deflected at right angles to the plane of the finger loop to a distance of 10 mm as measured at the tip of the blade. On release of the force, no permanent set shall be observed. The test shall be carried out on other arm also.

Adopted 29 May 1979 | © September 1979, ISI | Price Rs 6·00

INDIAN STANDARDS INSTITUTION
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

**6.3.2** The test shall be repeated on the same arm with the arm fixed in the vice near the joint so that 75 mm of the shank ( as measured from the upper surface of the vice jaws to the upper pole of the finger loop ) protrudes above the vice. The deflecting force shall be applied at the upper pole of the finger loop and shall act in a plane at right angles to the plane of the finger loop. The shank shall be deflected by 5 mm as measured at the upper pole of the finger loop. On release of force, no permanent set shall be observed. The test shall be carried out on the other arm also.



| Size | $L$<br>± 5 | $L_1$<br>± 2 | $L_2$<br>± 1 | $W$<br>± 0·5 | $W_1$<br>± 0·5 | $W_2$<br>± 0·5 | $T$<br>± 0·2 | $T_1$<br>± 0·2 | $C$†<br>± 0·5 | Screw‡ |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 140 | 45 | 25 | 10·5 | 8·0 | 10·5 | 1·6 | 5·5 | 11·5 | M2·5 |
| 2 | 165 | 65 | 32 | 11·0 | 8·7 | 11·2 | 2·4 | 5·5 | 15·5 | M2·5 |
| 3 | 190 | 70 | 32 | 12·5 | 9·5 | 12·7 | 2·4 | 6·5 | 17·5 | M3 |
| 4 | 215 | 80 | 38 | 13·5 | 10·5 | 14·3 | 2·4 | 7·0 | 19·0 | M3 |

***See* IS : 3642-1979 'General requirement for surgical instruments'.

†Applicable to curved blades only.

‡According to ISO metric threads [ *see* IS : 4218 ( Part I )-1967 to IS : 4248 ( Part VI )-1967 ].

All dimensions in millimetres.

FIG. 1 SCISSORS, DISSECTING, STRAIGHT AND CURVED ON FLAT, MAYO'S PATTERN

**6.4** *Corrosion Resistance Test* — Test the scissors in accordance with IS : 7531-1975 'Method for boiling and autoclaving test for corrosion resistance of stainless steel surgical instruments'. It shall show no sign of corrosion after the test.

**7. Marking** — The scissors shall be legibly and indelibly marked with the manufacturer's name, initials or recognized trade-mark and the words 'Stainless Steel'. The marking shall preferably be done by electrical etching and not by stamping.

**7.1** *ISI Certification Marking* — Details available with the Indian Standards Institution.

**8. Packing** — Each scissors may be wrapped in moisture-proof polyethylene bag and packed in carton in a manner that coming into contact with one another is avoided. The scissors may also be packed as agreed to between the purchaser and the manufacturer.

Printed at New India Printing Press, Khurja, India